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I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE WITH SUFFICIENT POSTAGE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO: COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450 ON:

Date: 12FEB-2004 By: DANIEL L. MICHALEK

PATENT
Attorney's Docket No. US00 8061

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

RENNERT

Application No.: 09/728,806

Filed: 12/02/2000

For: SCREEN RASTER GENERATION VIA PROGRAMMABLE LOOKUP TABLES

Group Art Unit: 2671

Examiner: Nguyen, Phu

Appeal No._____

BRIEF FOR APPELLANT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This appeal is from the decision of the Primary Examiner dated 10/22/2003, finally rejecting claims 1-15, which are reproduced as an Appendix to this brief.

The Commissioner is authorized to charge the fee of $330, and any other fees that may be required by this paper, to Deposit Account No. 14-1270.

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(1) Real Party in Interest

The real party in interest is the assignee, Philips Electronics North America Corporation.

(2) Related Appeals or Interferences

Applicant is not aware of any related appeals or interferences.

(3) Status of Claims

Claims 1-15 remain pending in the present application. All claims have been finally rejected and all claims are on appeal.

(4) Status of Amendments

All amendments have been entered. No amendment after final has been submitted.

(5) Summary of the Invention

The present invention relates to a a very flexible, descriptor-based method for generating display rasters for a screen display. Referring to claim 10, for example, a distinctive feature of the present invention is that, for each of multiple line entries, raster signals are applied according to a line type and a line count. As illustrated in Figure 7 of the specification, for example, a "Sync-Full-Active" line type is applied for one line count, a "S-H B-S-H-B" line type is applied for four line counts, and a "Sync-Full Black" line type is applied for one line count.

(6) The References

The rejection is based on the primary reference Matsubara (EP 0 936 594) and the secondary reference Baunach (US Patent 4,857,910).

Matsubara relates to a multi-sync type monitor that attempts to discover the type of video signal being applied based on the accompanying sync signals. A "catalog" of possible video signals is stored for purposes of comparison. Once the video signal has been identified as one of those described in the catalog, the signal is then displayed in accordance with the corresponding parameters.

Baunach, on the other hand, relates to the separate problem of efficiently describing display line *content*, as opposed to format. This object is accomplished by linking and unlinking strings of data words representative of bit maps.

(7) The Rejection

In the Final Rejection of October 22, 2003, claims 1-15 were rejected under 35 U.S.C. §103 as being unpatentable over Matsubara in view of Baunach. The rejection states in part:

> Matsubara...does not show "a line sequencer that is configured to sequence through a list of line descriptors." Baunach discloses sequencing through a list of raster line descriptors.... Thus it would have been obvious to combine the two references because such a system would allow a user to preview a plurality of display modes in order to select a preferred format.

(8) Issue

The sole issue presented is whether claims 1-15 would have been obvious in view of Matsubara in combination with Baunach.

(9) Argument

In considering the present invention in relation to the prior art, it is helpful to bear in mind a few important distinctions. One distinction distinguishes between display line content (e.g., Baunach) and display line format (e.g., Matsubara and the present invention). Another distinction pertains to display frame format and distinguishes between methods of describing the display frame format. One method (e.g., Matsubara) is parameter-based. The method of the present invention, on the other hand, may be described (in relation to at least some embodiments) as hierarchical. This hierarchical manner of display frame description may be observed, for example, in Figure 6 of the present specification. In Figure 6, there are three levels of hierarchy, including line entry (top-most), pattern (middle), and duration-value pair (bottom-most). A line entry describes one or more entire lines, a pattern describes a portion of a line, and a duration-value pair describes an even smaller portion of a line.

The present invention relates to a a very flexible, descriptor-based method for generating display rasters for a screen display. Referring to claim 10, for example, a distinctive feature of the present invention is that, for each of multiple line entries, raster signals are applied according to a line type and a line count. As illustrated in Figure 7 of the specification, for example, a "Sync-Full-Active" line type is applied for one line count, a "S-H B-S-H-B" line type is applied for four line counts, and a "Sync-Full Black" line type is applied for one line count.

Matsubara does not teach or suggest the raster generation approach followed by the present invention. Clearly Matsubara does not generate rasters for one video frame by applying raster signals corresponding to multiple line entries from the table of the cover figure of Matsubara (Figure 3). Rather, a video signal is first matched to a single line entry and then displayed in accordance with the corresponding parameters.

Furthermore, applicant submits that it would not have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the references in the manner suggested in the Office Action. As previously stated, Baunach, relates to the separate problem of efficiently describing display line *content*, as opposed to format. This object is accomplished by linking and unlinking strings of data words representative of bit maps. Conceivably, one might use the schemes of Matsubara and Baunach together. However, there is no teaching by which the use of the scheme of Baunach would alter the scheme of Matsubara, which would remain the same.

(10) CONCLUSION

For the foregoing reasons, claims 1-15 would not have been obvious in view of Matsubara in combination with Baunach.

Applicant respectfully submits therefore that the Final Rejection should be REVERSED.

Respectfully submitted,

By: _____
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Date: February 11, 2004

APPENDIX OF CLAIMS

1. A raster generator comprising:
a line sequencer that is configured to sequence through a list of line descriptors,
each line descriptor of the list of line descriptors including a line-count parameter and a line-type parameter,
the line-count parameter corresponding to a number of raster lines corresponding to the line-type parameter,
the line-type parameter corresponding to a descriptor of a sequence of raster signals that form each raster line corresponding to the line-type parameter, and
a signal generator that is configured to produce the sequence of raster signals based on the descriptor of the sequence.

2. The raster generator of claim 1, further including
a programmable memory that is configured to contain the list of line identifiers.

3. The raster generator of claim 1, wherein
each descriptor of the sequence of raster signals include a set of pattern identifiers, and
the raster generator further comprises
a pattern sequencer that is further configured to sequence through the set of pattern identifiers to produce a set of pattern sequences comprising the descriptor of the sequence.

4. The raster generator of claim 3, further including
a programmable memory that is configured to contain each set of pattern identifiers.

5. The raster generator of claim 3, wherein
each pattern sequence of the set of pattern sequences corresponds to a set of duration-value pairs, and
the signal generator produces the sequence of raster signals by applying particular raster values for particular durations, based on the duration-value pairs.

6. The raster generator of claim 5, further including
a programmable memory that is configured to contain each set of duration-value pairs.

7. An encoder that is configured to receive a digital representation of an image and to produce therefrom a composite video signal that is suitable for display on a display device, wherein the composite video signal includes a video component and a raster component, the encoder comprising:
a datapath that is configured to transform pixel data into the video component of the composite video, and
a raster generator that is configured to provide the raster component,
the raster component comprising a plurality of raster lines, wherein
the encoder also includes
a raster definition data set that is configured to include
a first link list that includes a plurality of line parameters,

each line parameter including a line-count parameter and a line-type parameter,

the line-count parameter corresponding to a number of raster lines of the plurality of raster lines corresponding to the line-type parameter, and

the line-type parameter including a pointer to one or more descriptors of the raster lines corresponding to the line-type parameter, and

the raster generator is configured to provide the raster component of the composite video signal by processing the descriptors of each of the raster lines, via the first link list.

8. The encoder of claim 7, wherein
the one or more descriptors of the raster lines includes
a second link list that includes pointers to one or more sets of raster sequences.

9. The encoder of claim 8, wherein
each of the one or more raster sequences include a plurality of sequence descriptors that define discrete intervals for asserting raster values.

10. A method for generating a raster, comprising
sequencing through a list of line entries that each include a line-type and a line-count, and
applying raster signals corresponding to each line-type repeatedly, based on the corresponding line-count.

11. The method of claim 10, further including
programming the list of line entries into a memory that is accessed to effect the method.

12. The method of claim 10, wherein
applying the raster signals corresponding to each line-type further includes
sequencing through a list of raster patterns corresponding to each line-type.

13. The method of claim 12, further including
programming the list of raster patterns into a memory that is accessed to effect the method.

14. The method of claim 12, wherein
applying the raster signals corresponding to each line-type further includes
sequencing through a list of duration-value pairs corresponding to each raster pattern.

15. The method of claim 14, further including
programming the list of duration-value pairs into a memory that is accessed to effect the method.